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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,976	02/27/2004	David McKay	WEAT/0372	6867

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EXAMINER

TSAY, FRANK

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/788,976

Applicant(s)

MCKAY ET AL.

Examiner

Frank S Tsay

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-27 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 10, 14, 17 and '38-45 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/12, 10/13, 1/21.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language "the sleeve" in claim 8 and the language "the drillable portion" in claim 44 all lack proper antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 10, 14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tibbitts '440.

The first body portion is anticipated by col. 5, line 30-41, where the drill bit is attached to a conventional drilling apparatus such as drill string or drill collar, the second body portion is met by bit body 10 which is partially receivable within the drill string or drill collar when so connected. The profiles formed on the outer surface of the second body portion are met by T-shape channel 120 (Fig. 9, for example), which is adapted to

engaged with the cutting member 126 for maintaining the cutting during drilling. The at least two intersection faces in the profile are met by the combination of the vertical and horizontal surfaces in the T shaped channel. The first end and second ends of the cutting member are clearly shown in the same figure, which are attached to the bit body and removable from the bit body from one end away from stop pin 130.

Claims 38-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Rector, Jr. '482.

The downhole valve is anticipated by the valve assembly shown specifically in Figs 4 and 5, which comprises a first body portion 22 having a bore 28 disposed therethrough. An obstruction member is met by ball 40 and the retainer is anticipated by the valve body 22, which retains the balls 40, 50. The two seating surfaces for balls are clearly anticipated by Fig. 5. The claimed aluminum drillable portion fails to render patentable distinction since in claim 38 no such portion is defined.

Claims 38-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al '819.

The obstruction member is met by plug 24 in conjunction with the piston 22 having valve 56 therein (see Figs 2 and 3). The retainer is met by bolts 50, which retains the obstruction member and cooperated the obstruction member to provide select fluid communication through the bore (Fig. 2, col. 4, lines 6-41). The first and second seating seat is met by shoulders 16 and 52, and the drillable aluminum portion is considered lacking structural distinction over claim 38.

Allowable Subject Matter

Claims 7, 9, 11-13, 15, 16, 18, 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 20-37 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. O'Leary, Bardwell, Jones, Pitifer, Wilson and Strong et al , all teach drilling apparatus having profiles means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank S Tsay whose telephone number is (703) 308-2170. The examiner can normally be reached on Monday thru Friday, 7:30am-5:00 pm, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on (703)308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frank S Tsay
Primary Examiner
Art Unit 3672

2/14/05